VE3FW—LARC call sign honours the memory of the Founding President P.J. "Pat" O'Shea

Inside this issue:

- Next Meeting Thursday June 8, 2006 at the Thunder Bay Airport Hangar at 7:30 pm
- FIELD DAY June 24/25 at VA3OJ's property on Rosslyn Road
- Check into the LARC 2 Meter ARES Net on YQT every Tuesday evening at 7:00 pm local time

June 2006 General Meeting
location change

The June 8, 2006
General Meeting
Will be held at
7:30pm
At our hangar located at the
Thunder Bay Airport
Across from Thunder Bay Aviation

(Confederation College meeting room is not available)

Bring your own chair, seating is limited!

LARC OPEN ACCESS REPEATERS

VE3YQT	Mount Baldy	147.060 (-600) Phone Patch
VE3TBR	St. Joseph's	146.820 (-600) 442.075 (+5 MHz)
VE3BGA	Hillcrest H.S.	145.450 (-600) (IRLP Node VA3LU 123.0 Hz) 442.825 (+5 MHz) (100.0 Hz)
VE3UPP	Upsala	145.470 (-600)

FIELD DAY 2006

June 24/25 2006

Location: VA3OJ Residence

2174 Rosslyn Road

Multi band antennas Lots of room to install your favorite wire antenna

I will be setting up a 2 m beam for SSB and a 10m vert. for use

Portapotty will be available

Bring a lawn chair to sit in.

Snacks will be available and probably coffee (maybe J)

Lots of room for tents if you plan to stay overnight. Small travel trailers welcome but call ahead please

More details are going to be discussed at the meeting. Any other info call Randy VA3OJ

Set up is Saturday June 24th morning. Radio starts at 2PM.

Joe VE3TBX

Lakehead Amateur Radio Club
Treasurers Report

Opening Balance - May 4, 2006	**$**	**4,306.15**
Income		
Ball Caps	$	76.00
50/50 Draw	$	10.00
Sale of Old Police Radios	$	905.00
Memberships	$	45.00
Interest	$	0.03
	$	-
Total Income	**$**	**1,036.03**
Expenses		
Thunder Bay Telephone	$	46.15
Bank Service Fee	$	1.50
Mallons - for Caps	$	454.37
Leo - HiQ Expenses	$	22.94
Total Expenses	**$**	**524.96**
Closing Balance - June 1, 2006	**$**	**4,817.22**

Joe - VE3TBX
Treasurer

LARC May 11, 2006 MINUTES
Terry, VA3LU

Terry VA3LU

May 11 2006

Minutes of Meeting

Meeting called to order by President John Sacek **VA3JMS** at 7:32 P.M.

Members in attendance 18

John **VA3JMS** Called for 2 Minutes of silence in honour of the late Joan Klemacki

Bill **VE3XT** gave a talk on HF propagation with a demo of using the time server and a software program called HF prop. Thanks Bill..

Meeting again called to order

Motion to accept minutes as read by **VE3BHN** and seconded by Joe **VE3TBX**, Motion Carried.

Motion to accept Treasurer report moved by Terry **VA3LU** and seconded by **VA3WRL**, Motion carried.

Committee reports
   Equipment: Terry **VA3LU** Rebuilt of VE3TBR repeater is under way
   Ares: Randy **VA3OJ** updated the members on Ares.
   Public Services: Brad **VA3MXJ** updated us on upcoming events.
   Canwarn: John **VA3JMS** updated the members.
   Trailer: Bob **VE3RVA** updated us on the status of the trailer.

Old Business:
   Joe **VE3TBX** updated the members on the executive decision to stay with our existing insurance carrier but we suggested that any replacement insurance be dropped. This would reduce our insurance cost from $1000.00 to about 344.80. Motion to stay with existing carrier by Joe **VE3TBX** and seconded by Terry **VA3LU**, Motion Carried.

New Business:
   Jerry **VE3BRN** passed around a list of equipment that was being offered for sale. Dave **VE3AVS** had some magazines to pass out.

Suggestion to have membership cards for September renewals.

Glen **VE3ICY** won 50/50 Draw

Motion to adjourn by Terry **VA3LU**.

Secretary Terry VA3LU

"Micro-Local" Weather Available Globally via APRS

Still another APRS application: Thanks to a remote locating system, the author knows the precise weather conditions at his weekend home.

Brian Wruble, W3BW

I like knowing the weather conditions in a very precise location—my weekend home, 10 acres on the Sassafras River, an estuary of the Chesapeake on Maryland's Eastern Shore. This is how I have met that need.

The Automatic Position Reporting System® (APRS®) is a very efficient means of allowing moving stations to be pinpointed on a map by a large number of observers. For example, there is a 2 metre FM transceiver installed in my wife's car, and this is as a safety measure. For a few dollars more, I added a virtually invisible GPS receiver, mag-mounted on the roof, and now her car can be tracked with high precision by anyone with Internet access. It happens that I drive her car more than she does, so mostly she is tracking me.

It is easy to configure an APRS station to transmit additional data along with position information, and weather information is a natural. Since APRS data quickly finds its way into the Internet, the weather data that radiates over the APRS network is also accessible, via Internet, from any-wherein the world. Follow this link, and you'll see contemporaneous weather data as transmitted by W3BW-5: www.findu.com/cgi-bin/ wxpage.cgi?call=w3bw-5&last=240.

What You'll Need

There are only a few building blocks in a Micro-Local weather station. First, you need weather measuring equipment. A complete suite can be acquired from reputable vendors. I set up my station using equipment from Peet Bros. www.peetbros.com. I use the Ultimeter 2100 system with sensors for wind speed and direction, a rain gauge and an outdoor temperature and humidity gauge. All of these sensors plug into a small console, about the size of a large

handheld transceiver. Inside the console, besides all the circuitry to collect, display and output data is a barometer and another temperature gauge ("indoor.")

In the normal home weather station, the console would be placed on a table or desk, its LCD screen visible and its control buttons accessible. Cables would then run from the console to those sensors that are be placed outdoors— the anemometer (wind speed and direction,) rain gauge and outdoor temperature/humidity sensor. In my setup, and I suspect many others, the house is not the best site for the weather sensors. Rain gauges and wind sensors need to be out in the open, well away from trees and structures that can distort readings. This requirement means that many Micro-Local weather Stations are *untended* and *remote.*

My neighbor, Ted, is a marine pilot and has a magnificent dock, He and I sited my weather station in his boathouse. The boathouse provides a sheltered spot as well as "shore power." Ted likes to keep close tabs on weather conditions around his boat, and I like to know if there is wind for sailing on the Sassafras.

I have to confess: This was my third attempt at siting the station. Attempt #1 was in the base of my tower, but the sensors were

constantly fouled by infestations of wasps and ants. The second site was my own dock, in a locked box, covered by a tarpaulin. This attempt came to a sudden conclusion when Hurricane Isabel left the not-quite-waterproof installation under about 6 feet under water.

In the current incarnation, now in service for more than two years, all the outdoor sensors are mounted on a collection of PVC pipes and couplings, glued together. The anemometer is at the top, well in the clear. The rain gauge is off to one side, again away from overhanging trees or eaves. The temperature/humidity gauge is at the bottom, housed in a special Peet Bros. "solar shield." It is accurate even in direct sunlight. The whole thing is mounted above Ted's boathouse, well out into the Sassafras River.

There are two other major pieces of the system, once you have the weather gear. First, you need a 2-metre FM transceiver with a suitable antenna.

By convention, all APRS activity in the US/Canada is on 144.39 MHz. If you can get the antenna high enough, you can use something no more powerful than a hand-held transceiver. I use an ICOM IC-2100H; a low-priced plain vanilla mobile rig set for 5W-output power. Very importantly, in the untended mode, you must have a time-out timer. This avoids an equipment failure that could cause a constant carrier on the APRS frequency. Using a menu on the IC-2100H, I set the "TOT" to 3 minutes.

The TNC

The *heart* of the system is the terminal node controller, and I strongly recommend a Kantronics KPC3+. For the money, this thing works miracles. It has sophisticated capabilities intended especially for APRS. When you think of packet radio, you probably picture a PC and a monitor—not so with an untended remote weather station. You use your PC for initial setup of the TNC, and you then place it in service without the PC. In fact the serial port of the TNC will be used instead as the port through which weather data arrives from the weather equipment.

There are many KPC3+ units in operation in weather applications. This means that it is easy to get information on how to hook up the TNC and how to configure it to do what you want. The KPC3+ is designed to use changing GPS data in a conventional position tracking application. In the case of a weather station, the known fixed position is entered into the TNC, and it never changes. The TNC uses its normal GPS functionality to input data from the weather equipment, and it formats the weather data for transmission as APRS packets. I have my system set up to "squawk" position every 30 minutes and weather data every *5* minutes. These packets, when they make their way into the Internet, appear as a very usable numerical and graphic record of weather conditions on a multi-day basis— cumulative rainfall, temperature, humidity, barometric pressure, average wind speed, speed of wind gusts and wind direction.

The weather console, TNC and transceiver, along with a 12V gel cell and a trickle charger all live in a locked toolbox in Ted's boathouse. There's a small 2-metre mag-mount whip antenna outside the boathouse. The configuration of my property is such that the house is on a bluff above the Sassafras, but the tower is on another, higher bluff, above the house, to the west. The signals from Ted's dock were not making it into the APRS network. I solved that problem by placing a 50W, 2-metre mobile transceiver and another KPC3+ in the relay box at the base of my tower, about 1000 feet from the boathouse. A 5/8 wavelength 2-metre vertical tops the tower, 135 feet above the Sassafras. This is configured as a digipeater ("W3BW-5"), and it carries the weather data easily into the system. It also fills in a needed coverage gap for APRS users on the upper Eastern Shore.

A while back, worried about a drought killing some trees we had planted, I had the chance to check the weather at my home in Maryland from an Internet café in Juneau, Alaska. That was a real thrill. For those who want to set up your own Micro-Local weather station, please feel free to use me as an Elmer.
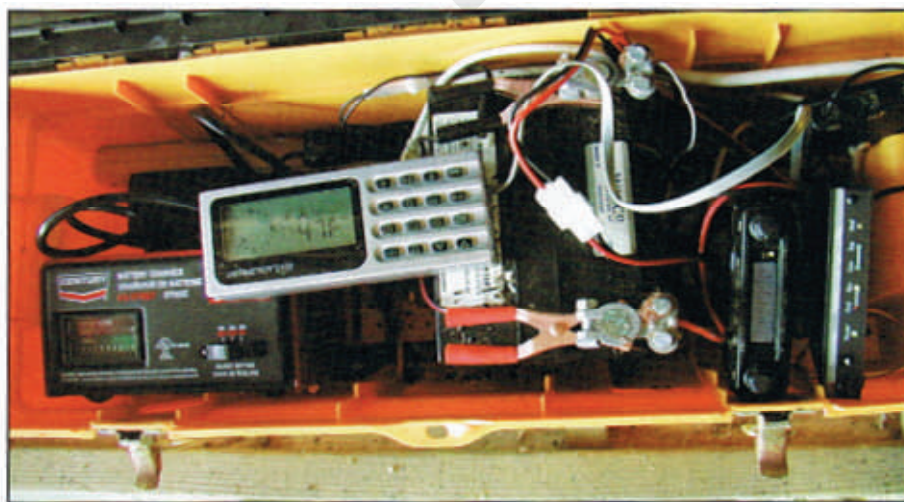
The Interior of the toolbox holding the Peet Bros. weather console, 2 metre transceiver, TNC, battery and battery charger.

Brian Wruble, a life member of the ARRL, AMSAT and QCWA, is a private investor in New York City. He holds a BEE and an MEE (Electrical Engineering) from Cornell University as well as an MBA from New York University A native of Kalamazoo, Michigan. You can reach the author at w3bw@amsat.org.

Some People will Go to Any Lengths (like 30 feet) to help out a fellow ham

Wayne **VA3WRL** and I (Judy **VA3EAP**) were out searching for a 30-foot (tree) pole for Brad, VE3MXJ, for his new antenna.

We were making a G5RV for Brad **VE3MXJ**, should be up tomorrow.. he didn't have the right place to hang an antenna like the G5RV so I went up the Spruce River Rd and got a pole that would do the trick.

Now imagine going down the road with that on my car to his place..!!

We took the back roads to his place in County park area...

Ed: note the overhang on the car!

Tnx to Wayne VA3WRL and Judy VA3EAP for the write-up and photos !

On May 2, 2006, Joan Klemacki **VE3NCN**, became a Silent Key. Joan joined Amateur Radio because of her husband Bill's (**VE3AJ**) great love for the hobby.
VE3NCN was a cheerful participant in all club activities and enjoyed all aspects of being a 'ham'!
She was there for field days, road trips to ham fests, monthly meetings and of course weekly breakfasts at the Blue Parrot.
Joan found the friendships formed through the association to be lasting ones and she was always proud to say she was a member of the Lakehead Amateur Radio Club.

With sorrow we note the passing of Joan.
You are missed by your fellow club members

This offer is available to ARES members only!

Identification ARES logos are available in the form of a magnetic stick-on for your car or truck..

They are 12" in diameter and display the RAC ARES logo.

Price is $12.50 each and are prepaid before ordering.

Terry **VA3LU** will take orders at the meeting in June and Randy **VA3OJ** will collect the money.

I will only order prepaid requests.

If any questions contact Randy **VA3OJ**

HI-Q

Editors QSK...

ON THE WEB

thanks to John, VE3EMI

Canadian Topographical Maps
http://atlas.nrcan.gc.ca/site/english/maps/topo/map

A backpack that generates electricity as its wearer strolls along

http://www.newscientist.com/article.ns?id=dn7970

Well, here it is! End of our meetings for the summer months!

One last chance to really get together and have a great time will be at the Field Day events starting June 24th.

This year, Randy VA3OJ is hosting it about a quarter of mile down the street from my home QTH.

Randy has done a lot of pre 'FD' work and assures us that there will be a lot of room for everyone! Let's take him up on that and even if you don't plan to operate, be sure to check out the action!

This will be the last regular issue of Hi-Q until fall.

Be sure to keep submitting your stories, news, pictures to my email for publication in the fall!

Thanks to all the contributors for this months Hi-Q! Your newsletter is only as good as we all make it!

That's it for now**.**
Have a great summer!

…_·_

73, Leo VE3ATC
email: ve3atc@spruce.ca
Ps. Not a writer and have a story or pictures? Contact me and I will help get it out!

Ps If you are interested in helping with Hi-Q publishing, offers are out to assisting me with layout, content, reporting, etc. I guess this would be like a partner position. However, we can make up a great title for the position that will give you warm feelings all over! Contact me for further info!

Don't Forget to Check in !!

LARC ARES 2 Meter Net

147.060

Every Tuesday at 7:00 pm On YQT !!

BRING YOUR CHAIR !!

Next regular meeting
Thursday
June 8, 2006
Thunder Bay Airport
LARC Hanger
Across from Thunder Bay Aviation
7:30 pm local

FOUNDING FATHERS 1934 ???

Can anyone identify any of these members believed to be part of the LARC founding fathers from a 1934 picture?
Jim VE3UA and myself are compiling the historical documents accumulated over the years for future club use.
If you have any documents, pictures, correspondence, don't destroy them! They may help fill in missing details! ve3atc

Lakehead Amateur Radio Club History Project

LARC PUBLIC SERVICES

ARES
District Emergency Coordinator
VE3FAL Fred Lesnick 577-0789
Emergency Coordinator
VA3OJ Randy Gottfred 474-0910

CANWARN
VA3JMS John 767-3631
VE3MXJ Brad 767-0628

PUBLIC SERVICE EVENTS
VE3MXJ Brad 767-0628
VA3JMS John 767-3631

RAC
Radio Amateurs of Canada

LARC SENATE		
Keith Fiske	VE3JQ
Pat Doherty	VE3PD
Dave Kimpton	VE3AVS
Laurie Bridgett	VE3BCD
Terry Stewardson	VA3LU
Ed Baumann	VE3SNW

LARC EXECUTIVE 2005—2006			
President	John Sacek	VA3JMS	767-3631
Vice-President	Bob Hansen	VE3RVA	767-6924
Secretary	Terry Stewardson	VA3LU	577-9439
Treasurer	Joe Coghlan	VE3TBX	344-6566
Directors	Brad Harris	VE3MXJ	767-0628
	Manuel Miguels	VE3MPT	475-5686
	Fort Michelizzi	VE3MCZ	475-0971
	Mark Vaillant	VA3MVR	
Past President	Bill Unger	VE3XT	344-1848

About LARC

Lakehead Amateur Radio Club members have all levels of interest and knowledge in the wide spectrum of amateur radio.

Monthly meetings and contact with other members allow us to share and discuss different ideas, and to learn from each other.

LARC membership meetings are held the second Thursday of each month, September through June
at 7:30 PM local time at the
McIntyre Building, Confederation College
Room 191

Each meeting consists of a mix of technical and light-hearted topics, with a break for meeting friends and new friends.

Anyone with an interest in ham radio is invited to join us.
Amateur radio classes are also administered by LARC
to help you with your Amateur Radio License
contact any of the Executive members above for more information

2005/2006 MEMBERSHIP/RENEWAL APPLICATION

LAKEHEAD AMATEUR RADIO CLUB INC

1100C MEMORIAL AVE, SUITE 184,
THUNDER BAY, ONT P7B4A3

CLASS OF MEMBERSHIP

   FULL MEMBERSHIP $35.00-open only to licensed amateurs

NAME: _____ EMAIL: _____

ADDRESS: _____CITY _____

TELEPHONE: (   )_____   POSTAL CODE_____

MAY WE PUBLISH THE PHONE NUMBER yes / no
MAY WE DELIVER Hi-Q BY E-MAIL?   yes / no

CALL(S) _____   _____

   FAMILY MEMBERSHIP- immediate family residing at the same address holding licenses. $35.00 plus $10.00 for each additional amateur.

         NAMES AND CALLS   _____   _____

                                     _____   _____

                                     _____   _____

   STUDENT MEMBERSHIP- $15.00-open to persons enrolled full time in an education

facility, list School and program _____

   ASSOCIATE MEMBERSHIP-$20.00-upon <u>approval of the Board</u> and open to:

1)Non holders of an amateur radio license.

2)Licensed amateurs living outside the immediate Thunder Bay area or are unable to attend regular meetings of the club.
   <u>If you feel you qualify for associate membership, please indicate why, on a separate sheet, to be used by the Board to consider your application.</u>

Please mail or bring this form to the next meeting with your cash or cheque for membership fees.

Cheques should be made payable to Lakehead Amateur Radio Club.

Applications and cheques can also be dropped off at the above address.